

Notice of Allowability

Application No.

09/923,137

Examiner

Sikyin Ip

Applicant(s)

BOGEL ET AL.

Art Unit

1742

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/07/03;12/11/03.
2. ☒ The allowed claim(s) is/are 1-8 and 10-16.
3. ☒ The drawings filed on 06 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>121103</u> . |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

SIKYIN IP
PRIMARY EXAMINER

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Examiner's Amendment

Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Gregory S. Rosenblatt, Esq. on December 11, 2003.

An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

This listing of claims replaces all prior versions and listings of claims in the application:

1 (Currently Amended) A copper alloy, consisting ~~essentially~~ of, by weight:
from 0.15% to 0.7% of chromium;
from 0.005% to 0.3% of silver;
from 0.01% to 0.15% of titanium;
from 0.01% to 0.10% of silicon;
up to 0.2% of iron;
up to 0.5% of tin;
optionally, from 0.001% to 0.1% of a deoxidizer selected from the group
consisting of boron, lithium, calcium and the rare earth metals;
optionally from 0.05% to 0.2% by weight, of magnesium;
optionally, at least a portion of the iron is replaced by cobalt on a 1:1, by weight,
basis and
the balance copper and inevitable impurities, wherein said copper alloy is
essentially zirconium-free and has an electrical conductivity of at least 75% IACS and a
yield strength on the order of 80 ksi.

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2. (Original) The copper alloy of claim 1, consisting ~~essentially~~ of, by weight:
 - from 0.25% to 0.6% of chromium;
 - from 0.015% to 0.2% of silver;
 - from 0.01% to 0.08% of titanium;
 - from 0.01% to 0.10% of silicon;
 - less than 0.1% of iron;
 - up to 0.25% of tin; and
 - the balance copper and inevitable impurities.
3. (Original) The copper alloy of claim 2 having a maximum of 0.065% of titanium.
4. (Original) The copper alloy of claim 2 having a minimum of 0.05% of titanium.
5. (Original) The copper alloy of claim 2, consisting ~~essentially~~ of, by weight:
 - from 0.3% to 0.55% of chromium;
 - from 0.08% to 0.13% of silver;
 - from 0.02% to 0.065% of titanium;
 - from 0.02% to 0.05% of silicon;
 - from 0.03% to 0.09% of iron;
 - less than 0.05% of tin; and
 - the balance copper and inevitable impurities.
6. (Currently Amended) The copper alloy of claim ~~2~~ 1 wherein a ratio, by weight, of iron to titanium, Fe:Ti, is from ~~0.9:1 to 1.1:1~~ 0.7:1 to 2.5:1.
7. (Currently Amended) The copper alloy of claim 6 where Fe:Ti is from about ~~1:1~~ 0.9:1 to 1.7:1.
8. (Original) The copper alloy of claim 6 wherein at least a portion of the iron is replaced with cobalt on a 1:1, by weight, basis.
9. (Cancelled)

10. (Original) The copper alloy of claim 1 having a Quality Function Deployment, QFD, value in excess of 50 for both automotive and multimedia applications.
11. (Original) The copper alloy of claim 1 further containing from 0.05% to 0.2%, by weight, of magnesium.
12. (Original) The copper alloy of claim 10 formed into an electrical connector.
13. (Previously Amended) The copper alloy of claim 12 wherein said electrical connector has a box shape.
14. (Original) The copper alloy of claim 10 formed into a leadframe.
15. (Original) The copper alloy of claim 1 formed into a rod.
16. (Original) The copper alloy of claim 1 formed into a wire.
17. - 68. (Cancelled)

The following is an Examiner's Statement of Reasons for Allowance: The transitional expression "consisting of" has excluded additional essential elements from JP 1198439 and references of record. Furthermore, the combination of alloy composition, yield strength, and electrical conductivity is not taught, suggested, and disclosed by references of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (703) 308-2542. The examiner can normally be reached on Monday to Friday from 5:30 AM to 2:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (703)-308-1146.

The facsimile phone number for "After Final Official Papers" is (703) 305-3599, "All Other Official Papers" is (703) 305-7718, and "Unofficial Papers" is (703) 305-7719. When filing a FAX in Technology Center 1700, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.



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PRIMARY EXAMINER
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S. Ip
December 11, 2003